

## User Manual - Automatic Transfer Switch



### **230V**

Amp : 10A / 16A  
Outlet : C13 / C19



### **208V**

Amp : 20A  
Outlet : C13 / C19



### **110V**

Amp : 15A / 20A  
Outlet : US NEMA

Designed and manufactured by Austin Hughes

## Legal Information

First English printing, October 2002

Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. We are not liable for any injury or loss that results from the use of this equipment.

## Safety Instructions

**Please read all of these instructions carefully before you use the device. Save this manual for future reference.**

- Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.
- Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned environment with temperatures not exceeding 40° Celsius (104° Fahrenheit).
- When installing, place the equipment on a sturdy, level surface to prevent it from accidentally falling and causing damage to other equipment or injury to persons nearby.
- When the equipment is in an open position, do not cover, block or in any way obstruct the gap between it and the power supply. Proper air convection is necessary to keep it from overheating.
- Arrange the equipment's power cord in such a way that others won't trip or fall over it.
- If you are using a power cord that didn't ship with the equipment, ensure that it is rated for the voltage and current labelled on the equipment's electrical ratings label. The voltage rating on the cord should be higher than the one listed on the equipment's ratings label.
- Observe all precautions and warnings attached to the equipment.
- If you don't intend on using the equipment for a long time, disconnect it from the power outlet to prevent being damaged by transient over-voltage.
- Keep all liquids away from the equipment to minimize the risk of accidental spillage. Liquid spilled on to the power supply or on other hardware may cause damage, fire or electrical shock.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalidate its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

## What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - ☐ Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - ☐ Repair or attempted repair by anyone not authorized by us.
  - ☐ Any damage of the product due to shipment.
  - ☐ Removal or installation of the product.
  - ☐ Causes external to the product, such as electric power fluctuation or failure.
  - ☐ Use of supplies or parts not meeting our specifications.
  - ☐ Normal wear and tear.
  - ☐ Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

## Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-position or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

# Content

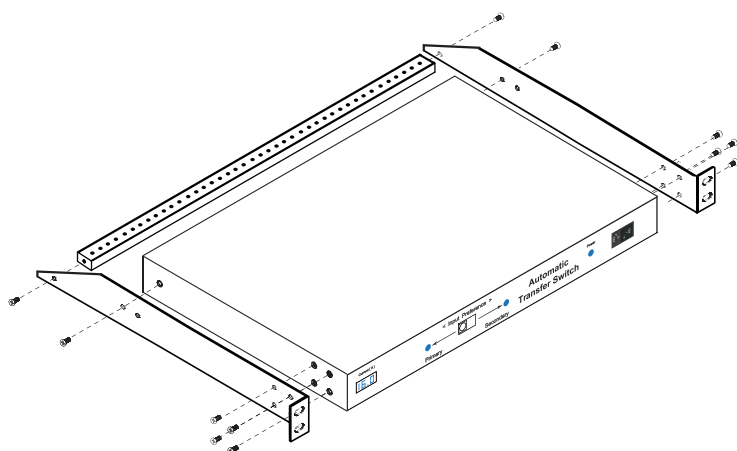
Part I. ATS Installation & Connection		Page
< 1.1 >	Package Content	1
< 1.2 >	Product Overview	2
< 1.3 >	Installation	3
< 1.4 >	Power Sources Connection	4
< 1.5 >	Devices Connection	4
Part II. Model & Specification		
< 2.1 >	230V ATS	5
< 2.2 >	208V ATS	7
< 2.3 >	110V ATS	9

## Unpacking

The equipment comes with the standard parts shown in package content. Check and make sure they are included and in good condition. If anything is missing, or damaged, contact the supplier immediately.

## Part I. ATS Installation & Connection

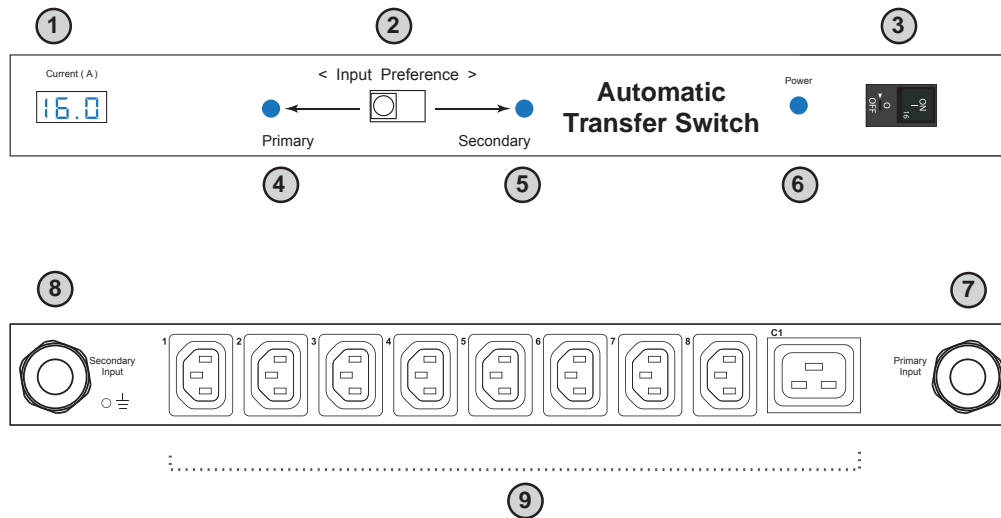
### < 1.1 > Package Content



- Rackmount ATS unit x 1
- Mounting Bracket ( set of 3 ) x 1
- M3.2\*4.5 mm screw x 12

## < 1.2 > Product Overview

InfraPower Rackmount Automatic Transfer Switch ( ATS ) with dual power input provides reliable and redundant power for single-corded equipment. By the input preference switch, users can define the preferred power source. If the primary source is unavailable, the ATS will seamlessly source power from the secondary source without power interruption and downtime. The entire ATS series are designed with a local current meter to easily observe power status and device load.




- 1 Local Current Meter
- 2 Input Preference Switch
- 3 Circuit Breaker
- 4 Power LED - primary input
- 5 Power LED - secondary input
- 6 Power LED - outlets
- 7 Primary Input attached with 3M cord & inlet plug
- 8 Secondary Input attached with 3M cord & inlet plug
- 9 Outlets

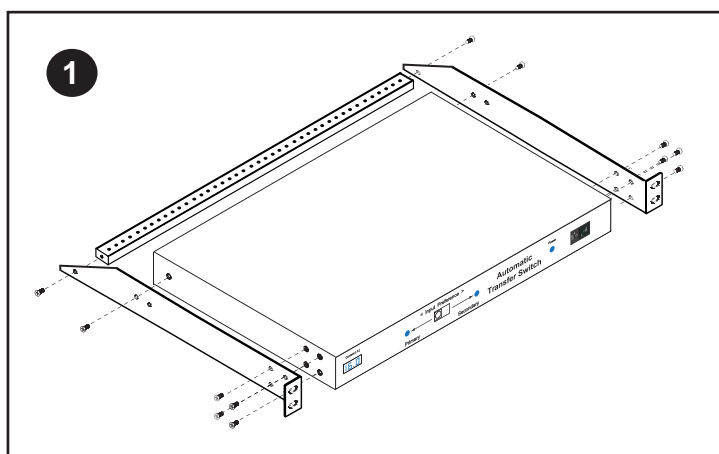
## < 1.3 > Installation

### Before Installation

- It is very important to mount the equipment in a suitable cabinet or on a stable surface.
- Make sure the place has a good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.

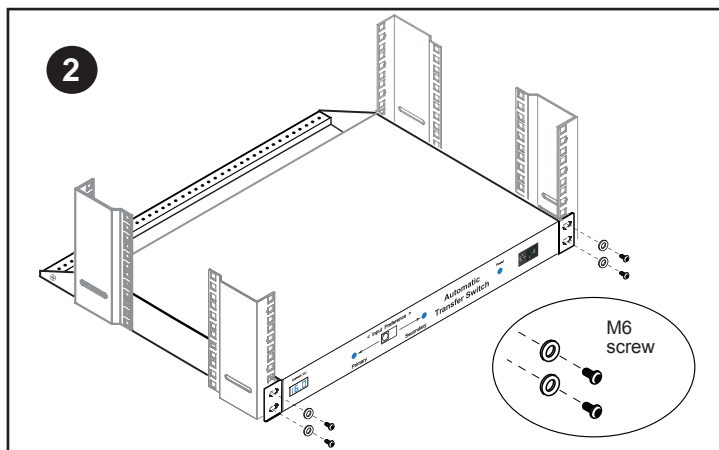
 All electrical power and power control wiring must be installed by a qualified electrician and comply with local and national regulations.

 Don't exceed the outlet, branch or phase limitations



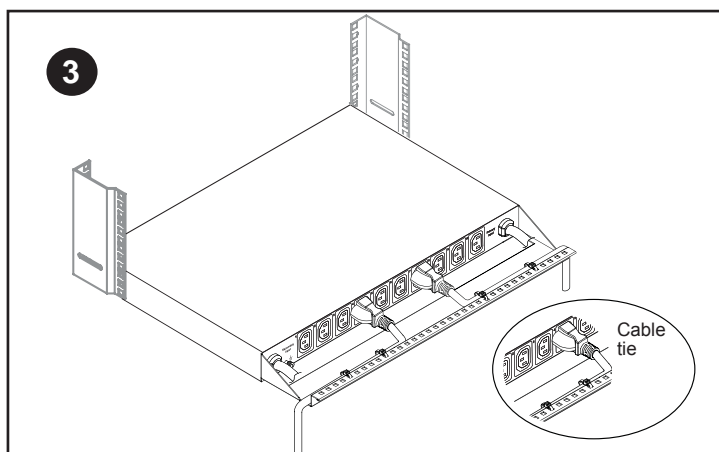
### Step 1

Use the provided screws to attach the mounting bracket set ( set of 3 ).



### Step 2

Use the M6 screw set to secure the ATS to your rack ( M6 screws not provided ).



### Step 3

Use the cable ties to fasten each power cord to the cord retention tray ( cable ties not provided ).

## < 1.4 > Power Sources Connection

### Step 1 : Before Power Source Connection



This Transfer Switch requires that the applied AC waveforms from both power sources be in phase with respect to each other. Failure to do so can potentially damage the unit and create an unexpected

#### HIGH VOLTAGE

to be present on the pins of either the Primary Source or Secondary Source plug when disconnected, or on the Primary Source or Secondary Source output receptacles.

For questions concerning this requirement please contact Austin Hughes Technical Support.  
E-mail : [support@infra-power.com](mailto:support@infra-power.com)



All electrical power and power control wiring must be installed by a qualified electrician and comply with local and national regulations.

Don't exceed the outlet, branch or phase limitations

### Step 2 : Power Source Connection

Plug the male end of the power cord into the AC power source.

#### Power Source Association

After the power source connection, the ATS input power LEDs ( primary & secondary input ) will indicate the power ON / OFF status. Then slide the input preference switch to the primary input.

Primary Input / LED	Secondary Input / LED	Output Power Source
ON	ON	Primary
OFF	ON	Secondary
ON	OFF	Primary
OFF	OFF	OFF

## < 1.5 > Devices Connection

**Step 1 : Before connect the devices to the ATS outlet, please keep the device's on / off switch in the off position.**

**Step 2 : After connect the devices to the ATS outlet, please power on the device.**

**Step 3 : Fasten device's power cord to the cord retention tray with cable ties.**



Do not exceed the ATS maximum current loads.

## Part II. Model & Specification

### < 2.1 > 230V ATS Models

Model List - 10 Amp	Height	Outlet	Inlet x 2 ( 3M cord attached )
ATS-H8C13-10A_C14	1U	C13 x 8	C14 input plug
ATS-H10C13-10A_C14	1U	C13 x 10	
ATS-H12C13-10A_C14	2U	C13 x 12	
ATS-H16C13-10A_C14	2U	C13 x 16	

Model List - 16 Amp	Height	Outlet	Inlet x 2 ( 3M cord attached )
ATS-H8C13-16A_EN	1U	C13 x 8	EN16 60309 input plug
ATS-H10C13-16A_EN	1U	C13 x 10	
ATS-H12C13-16A_EN	2U	C13 x 12	
ATS-H16C13-16A_EN	2U	C13 x 16	
ATS-H20C13-16A_EN	2U	C13 x 20	
ATS-H8C13 / 1C19-16A_EN	1U	C13 x 8 + C19 x 1	
ATS-H16C13 / 2C19-16A_EN	2U	C13 x 16 + C19 x 2	

Model List - 16 Amp	Height	Outlet	Inlet x 2 ( 3M cord attached )
ATS-H8C13-16A_C20	1U	C13 x 8	C20 input plug
ATS-H10C13-16A_C20	1U	C13 x 10	
ATS-H12C13-16A_C20	2U	C13 x 12	
ATS-H16C13-16A_C20	2U	C13 x 16	
ATS-H20C13-16A_C20	2U	C13 x 20	
ATS-H8C13 / 1C19-16A_C20	1U	C13 x 8 + C19 x 1	
ATS-H16C13 / 2C19-16A_C20	2U	C13 x 16 + C19 x 2	

## < 2.1 > 230V ATS Specification

Electrical	Nominal input voltage	230V
	Acceptable input voltage	±10% nominal
	Input frequency	50 / 60Hz
	Inlet plug & cord	2 x C14 / C20 / EN16 60309 plug with 3-meter cord
	Outlet connectors	Multiple C13 / C19 outlets
	Local meter	3-digital LED current meter
	Overload protection	1 x 10-amp circuit breaker for C14 inlet 1 x 16-amp circuit breaker for C20 / EN16 60309 inlet
	Transfer time	25ms maximum
	Electrical endurance	1 x 10 <sup>5</sup> operations
	Power consumption	Approx. 8VA
Physical	Product dimensions ( 1U )	442 x 270 x 43.5 mm ( W x D x H )
	Packing dimensions ( 1U )	530 x 380 x 80 mm ( W x D x H )
	Net weight	4.6 kg / 10.1 lb
	Gross weight	5.1 kg / 11.2 lb
	Product dimensions ( 2U )	442 x 270 x 87.5 mm ( W x D x H )
	Packing dimensions ( 2U )	530 x 380 x 140 mm ( W x D x H )
	Net weight	6.5 kg / 14.3 lb
	Gross weight	7 kg / 15.4 lb
	Chassis color / materials	Dark / Steel
Environmental	Operating temperature	-5 to 45°C degree ( 23 to 113°F )
	Storage temperature	-25 to 65°C degree ( 13 to 149°F )
	Operating humidity	0~95%, non-condensing
	Storage humidity	0~95%, non-condensing
Compliance	EMC	FCC & CE certified
	Safety	LVD certified
	Environment	RoHS2 & REACH compliant

## < 2.2 > 208V ATS Models

Model List - 20 Amp	Height	Outlet	Inlet x 2 ( 3M cord attached )
ATS-H8C13-20A_L6-20P	1U	C13 x 8	L6-20P input plug
ATS-H10C13-20A_L6-20P	1U	C13 x 10	
ATS-H12C13-20A_L6-20P	2U	C13 x 12	
ATS-H16C13-20A_L6-20P	2U	C13 x 16	
ATS-H20C13-20A_L6-20P	2U	C13 x 20	
ATS-H8C13 / 1C19-20A_L6-20P	1U	C13 x 8 + C19 x 1	
ATS-H16C13 / 2C19-20A_L6-20P	2U	C13 x 16 + C19 x 2	

## < 2.2 > 208V ATS Specification

Electrical	Nominal input voltage	208V
	Acceptable input voltage	±10% nominal
	Input frequency	50 / 60Hz
	Inlet plug & cord	2 x L6-20P plug with 3-meter cord
	Outlet connectors	Multiple C13 / C19 outlets
	Local meter	3-digital LED current meter
	Overload protection	1 x 20-amp circuit breaker
	Transfer time	25ms maximum
	Electrical endurance	1 x 10 <sup>5</sup> operations
	Power consumption	Approx. 8VA
Physical	Product dimensions ( 1U )	442 x 270 x 43.5 mm ( W x D x H )
	Packing dimensions ( 1U )	530 x 380 x 80 mm ( W x D x H )
	Net weight	4.6 kg / 10.1 lb
	Gross weight	5.1 kg / 11.2 lb
	Product dimensions ( 2U )	442 x 270 x 87.5 mm ( W x D x H )
	Packing dimensions ( 2U )	530 x 380 x 140 mm ( W x D x H )
	Net weight	6.5 kg / 14.3 lb
	Gross weight	7 kg / 15.4 lb
	Chassis color / materials	Dark / Steel
Environmental	Operating temperature	-5 to 45°C degree ( 23 to 113°F )
	Storage temperature	-25 to 65°C degree ( 13 to 149°F )
	Operating humidity	0~95%, non-condensing
	Storage humidity	0~95%, non-condensing
Compliance	EMC	FCC & CE certified
	Safety	LVD certified
	Environment	RoHS2 & REACH compliant

### < 2.3 > 110V ATS Models

Model List - 15 Amp	Height	Outlet	Inlet x 2 ( 3M cord attached )
ATS-H8US-15A_5-15P	1U	NEMA x 8	NEMA 5-15P input plug
ATS-H10US-15A_5-15P	1U	NEMA x 10	
ATS-H12US-15A_5-15P	2U	NEMA x 12	
ATS-H16US-15A_5-15P	2U	NEMA x 16	
ATS-H20US-15A_5-15P	2U	NEMA x 20	

Model List - 20 Amp	Height	Outlet	Inlet x 2 ( 3M cord attached )
ATS-H8US-20A_L5-20P	1U	NEMA x 8	NEMA L5-20P input plug
ATS-H10US-20A_L5-20P	1U	NEMA x 10	
ATS-H12US-20A_L5-20P	2U	NEMA x 12	
ATS-H16US-20A_L5-20P	2U	NEMA x 16	
ATS-H20US-20A_L5-20P	2U	NEMA x 20	

## < 2.3 > 110V ATS Specification

<b>Electrical</b>	Nominal input voltage	110V
	Acceptable input voltage	±10% nominal
	Input frequency	50 / 60Hz
	Inlet plug & cord	2 x NEMA 5-15P / L5-20P plug with 3-meter cord
	Outlet connectors	Multiple NEMA 5-20R outlets
	Local meter	3-digital LED current meter
	Overload protection	1 x 15-amp circuit breaker for NEMA 5-15P inlet 1 x 20-amp circuit breaker for NEMA L5-20P inlet
	Transfer time	25ms maximum
	Electrical endurance	1 x 10 <sup>5</sup> operations
	Power consumption	Approx. 8VA

<b>Physical</b>	Product dimensions ( 1U )	442 x 270 x 43.5 mm ( W x D x H )
	Packing dimensions ( 1U )	530 x 380 x 80 mm ( W x D x H )
	Net weight	4.6 kg / 10.1 lb
	Gross weight	5.1 kg / 11.2 lb
	Product dimensions ( 2U )	442 x 270 x 87.5 mm ( W x D x H )
	Packing dimensions ( 2U )	530 x 380 x 140 mm ( W x D x H )
	Net weight	6.5 kg / 14.3 lb
	Gross weight	7 kg / 15.4 lb
	Chassis color / materials	Dark / Steel

<b>Environmental</b>	Operating temperature	-5 to 45°C degree ( 23 to 113°F )
	Storage temperature	-25 to 65°C degree ( 13 to 149°F )
	Operating humidity	0~95%, non-condensing
	Storage humidity	0~95%, non-condensing

<b>Compliance</b>	EMC	FCC & CE certified
	Safety	LVD certified
	Environment	RoHS2 & REACH compliant

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